WO 2005/097438 PCT/DK2005/000194

9

## Patent claims

5

15

- 1. Method for portion cutting of food items, especially meat products, in pieces of predetermined shape, such as substantially quadratic meat pieces, characterised in that the cutting is carried out in two cutting stages, where the first stage prepares the item by cutting an item into parts, which at a second cutting stage are cut into pieces of predetermined weight and dimension.
- 2. Method for portion cutting of food items according to claim 1, where the method comprises the following steps:
  - feeding of the items in a first cutting device in a first feeding direction, in which device the items are cut into strips in a cutting unit,,
  - transfer of the strips from the first cutting device to at least one further cutting device with a feeding direction which is different from that of the first feeding direction, and
  - cutting in the at least one further cutting device, in which the strips are cut in a cutting unit into pieces of predetermined shape, such as substantially quadratic meat pieces.
- 3. Method according to claim 1 or 2, whereby in the first cutting device there is carried out a scanning of the shape, structure and/or dimension of the food item.
  - 4. Method according to any of the claims 1 to 3, whereby other scanning of the shape, structure and/or dimension of the strips is performed in the one or more further cutting devices.
  - 5. Method according to any of the claims 1 to 4, whereby a portion-cutting profile is determined in connection with the first scanning and on the basis of predetermined dimensions and/or weight of the pieces.

25

**WO 2**005/097438

- 6. Method according to claim 5, whereby at least a part of said portion-cutting profile is communicated further to one or more of the additional cutting devices.
- 7. Method according to any of the foregoing claims, where the feeding directions for two or more additional cutting devices lie substantially parallel with one another.
  - 8. Method according to any of the foregoing claims, where the feeding direction for the at least one additional cutting device lies substantially at right-angles to the first feeding direction.

10

5

- 9. Method according to any of the foregoing claims, which further comprises manual placing of the food items in the first cutting device and/or manual transfer of the strips to one or more of the additional cutting devices.
- 10. Method according to any of the foregoing claims, which further comprises non-manual placing of the food items in the first cutting device and/or non-manual transfer of the strips to one or more of the additional cutting devices.
- 11. Arrangement for portion cutting of food items, especially meat products, in20 pieces of predetermined weight and dimensions, such as quadratic meat pieces, comprising
  - a first cutting device which comprises a cutting unit for the cutting of the food items into strips during the feeding of the items in a first feeding direction,
- one or more additional cutting devices, each comprising a cutting unit for the cutting of the strips into pieces of predetermined weight and dimensions, such as substantially quadratic meat pieces, during the feeding of the items in another feeding direction different from the first feeding direction and after transfer.

WO 2005/097438 PCT/DK2005/000194

11

- 12. Arrangement according to claim 11, where measuring means are arranged in the first cutting device for the scanning of the shape, structure and/or dimension of the food item.
- 5 13. Arrangement according to claim 11 or 12, which further comprises processor means for the planning of the portion-cutting profile for the cutting means on the basis of said scanning.
- 14. Arrangement according to claim 13, where the processor means are arranged to send at least a part of the portion cutting profile further to the one or more of the additional cutting devices.
  - 15. Arrangement according to any of the claims 11-14, which further comprises transfer means for the transfer of one or more of the strips from the first cutting device to the one or more of the additional cutting devices.
    - 16. Arrangement according to any of the claims 11-15, which further comprises placing means for the placing of the food items in the first cutting device.
- 20 17. Use of a cutting device in an arrangement according to any of the claims 11 to 16.
  - 18. Use according to claim 17, where said cutting device is arranged to send at least a part of a portion-cutting profile further to other cutting devices.

15